

1. What might be the experience effect?

- Experienced people cost more: In software it often costs 3-4 times as much to hire people with appropriate experience, thus the cost is impacted
- The impact of experience of the hires depends on what they will be used for, what kind of work they'll do.
- There are difference between projects: there are some people that are almost irreplaceable in terms of experience (for example, testing people).
- There are projects for which no "1.0" experience person exists because no-one has prior hands-on experience with the organization.
- Easy to hire engineers with high level of skills but difficult to find designers with good experience, on average 3 years are needed for design people to accumulate experience.

2. What causes project quality problems?

- Schedule pressure
- Lack of skill
- Lack of downtime (fatigue)
- Late changes
- Leading changes
- Lack of motivation
- Incomplete information from suppliers and / or platforms
- Passive resistance, political agendas
- Failure to understand the requirements
- Failure to consider the downstream effects
- Poor configuration management
- Over-commitment, failure to understand the organization's capabilities

3. What are the pros of a spiral approach vs waterfall:

Pros for spiral:

- Difficulties surface earlier
- Early feedback from customers helps to refine what the requirements are.

- Design for flexibility or reliability can't be done in spiral model.

Cons for spiral:

- Makes it harder to schedule teams
- Sometimes it gives a false sense of completion (especially in software)
- There can be a disconnect between reality and the prototype that is developed - the customer is conditioned to expect what he saw in the prototype, therefore inflexibility to change later
- Because of schedule pressure, features of the prototype end up in the product while that's not what was intended.

4. IPTs Pros & Cons:

Pros

- New ways of conveying functional info early on

Cons

- expertise in the functional areas is lost over time